NEWS REPORT

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Editor: WALLACE W. ATWOOD, JR.

Editorial Office: 2101 Constitution Ave., Washington 25, D. C.

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NEWS REPORT

National Academy of Sciences *National Research Council*

VOLUME X *January-February 1960* NUMBER 1

Some Developments in Scientific Relations with Latin America

ANDRÉ C. SIMONPIETRI,

Associate Director, Office of International Relations

THE RECENT renaissance of interest in Latin America is evident on many sides and in many fields. In science and technology this interest is reflected in the many cooperative programs which have been initiated in recent years. Some of these programs are being undertaken by intergovernmental bodies such as the Organization of American States (OAS), United Nations Educational, Scientific and Cultural Organization (Unesco), Food and Agriculture Organization (FAO), and the World Health Organization (WHO). Others are being sponsored by individual governments, by private foundations, which have long been interested in the Latin American scene, by universities having common interests, and by the scientists themselves. When viewed together, the picture is one of great activity which warrants thoughtful study on the part of world citizens everywhere.

The interest of the Academy–Research Council and of the scientific community of the United States in the growth of science and scientific institutions in Latin America dates back many years. Cooperative programs have been in operation for several decades. The Academy's program for the preservation of indigenous strains of maize is a case in point. However, only recently has the Academy–Research Council been called upon by agencies of the Federal Government to assist in the formulation and guidance of scientific programs to be undertaken in cooperation with the governments and the scientific institutions of neighboring republics. This is a new and important responsibility which the Academy–Research Council has assumed with humility but with confidence that working more closely with its sister academies and research councils in Latin America, in itself a rewarding consequence, will result in even more tangible mutual benefit.

This article will describe briefly some of the current activities of the Academy–Research Council as they concern science in Latin America. Special attention has been given here to projects undertaken at the request of the Government. The Academy–Research Council, however, realizes that the relationship of scientific institution to scientific institution is of paramount importance.

Cooperation with the Government

Early in 1956, the U. S. Department of State requested the Academy–Research Council to establish advisory committees in geography and cartography to provide scientific consultative services in connection with United States participation in the respective Commissions of the Pan American Institute of Geography and History (PAIGH), a specialized agency of the Organization of American States in which all 21 American Republics hold membership. These two committees were duly established and have been continuously active. The advice and counsel provided by them has afforded the Department a broader base for review and decision than would be possible through other means. Lately, the Department has had occasion to request consultative services of the committees on an even wider basis, such as technical and scientific matters coming before the United Nations.

The Department of State provides the secretariat for the U. S. National Commission for Unesco. The Seventh National Conference of the Commission was held in Denver, Colo., September 28–October 2, 1959. The meeting was devoted entirely to Latin America. The Academy–Research Council was asked to organize the science section of the conference, because the Department depends upon the Academy's Committee on Science in Unesco for advice on the science aspects of the Unesco program (*see* NEWS REPORT, Vol. IX, No. 4, p. 57, 1959).

For some time the Academy has been collaborating with the International Cooperation Administration (ICA), first on its fellowship program, and more recently by giving advice on the application of science and technology in foreign aid programs in developing regions and countries, such as Africa and Latin America.

The Academy's Visiting Research Scientists Program, financed by ICA, initially was operative in the NATO countries. In 1958 the Academy's recommendations that this successful program be extended to Latin America, Southeast Asia, and Africa were approved. The same procedure of requesting responsible scientific institutions to establish selection committees in the recipient countries was followed and a representative of the Academy visited some nine Latin American countries for this purpose.

In January of this year the President of the Academy appointed 10 scientists to serve on a committee on inter-American scientific cooperation (*see* Science News, p. 5). This committee will be concerned with science in Latin America and, among other duties, will serve to back-stop ICA programs in specific countries. Details are given below in connection with a special program in Chile. The Academy has also been asked to consider undertaking, in cooperation with Brazilian institutions, a study of the science and technology needs of the institutions of higher learning in that country. The committee's advice is to be provided to or may be requested by ICA headquarters in Washington, D. C., or by the U. S. Operations Missions (USOM) in Latin America. The committee is expected to use its own initiative also in bringing matters which it considers important to the attention of the agency.

By the same token, the services which the Academy has been providing to ICA in some cases go beyond the provision of advice and include certain types of operations. The latter are concerned primarily with the selection of qualified people to render services overseas.

The U. S. Government recently entered into an agreement with the Government of Chile to strengthen scientific teaching and research in the seven universities of that country. The ICA has requested the Academy's assistance in the execution of this responsibility. The committee referred to above will guide this important project. A contract with ICA will provide funds for the services of a coordinator for a two-year period and for short-term consultants totalling approximately 12 man-years, in accordance with a plan to be developed by a survey team headed by the coordinator.

The first action under this contract consisted of arranging for four top-flight engineering professors to lecture in the new School for Graduate Engineers in Chile in July and August 1959. The team of professors came from the University of California, The George Washington University,

Massachusetts Institute of Technology, and the California Institute of Technology.

In late 1958 and early 1959, a number of Government agencies sent representatives or teams to Latin America to explore the possibilities for both collaborative research contracts and the establishment of regional offices. At the beginning of the summer of 1959, additional agencies were considering sending representatives on similar missions. The U. S. Embassies on the East Coast, when consulted, recommended a coordinated approach, and as a result a Science Mission to Brazil, Uruguay, and Argentina was organized consisting of nine scientists from seven agencies. The nine members divided into three groups—physical sciences, life sciences, and earth sciences. In each country contact was made with the U. S. Embassy and with the national scientific institutions including the national research councils, the science faculties of the universities, and atomic energy commissions. A total of approximately 50 institutions were visited, and a report of the Mission will be available shortly.

Cooperation with International Organizations

The Academy–Research Council is the adhering body for the scientists of the United States to the International Council of Scientific Unions (ICSU), and to its associated unions. This federation of international non-governmental organizations was the sponsor of the International Geophysical Year (IGY). The Academy welcomed the opportunity afforded by this international cooperative program to establish closer relationships with geophysical institutions and scientists in related fields throughout Latin America. The U. S. National Committee for the IGY maintained continuing contact with the Assistant Secretary for the Western Hemisphere of the Special Committee for the International Geophysical Year (CSAGI) and sent a substantial delegation to the IGY Western Hemisphere Regional Conference held in Brazil in July 1956. The respective panels of the U. S. Committee, for the various fields of science of the IGY, maintained close working relationships with their colleagues in Latin America, and many panel representatives made field visits there during both the preparatory period and the IGY itself.

With substantive support from this country, many IGY stations were established, equipped, and manned as a part of this cooperative venture. The fields of interest included among others, rocket and satellite tracking stations, cosmic ray and ionospheric observations, longitude and latitude calculations, oceanography, and meteorology. The extraordinary impetus given to the development of geophysics in Latin America by the IGY is not being allowed to die, and United States institutions continue to maintain the close relationship previously mentioned.

In addition to ICSU and its 13 associated unions, there are many intergovernmental organizations with interests and responsibilities in science. Principal among these bodies in the Americas is the Organization of American States (OAS).

The OAS came into being in 1948 and its charter provides that the Pan American Union (PAU), established originally in the 1880's by action of all the American Governments, shall serve as the general secretariat of the Organization. The headquarters of the Organization and the seat of the PAU are located on Constitution Avenue in Washington, D. C., only four blocks from the National Academy of Sciences. This propinquity facilitates the close cooperation existing now between the Academy and the Pan American organizations mentioned.

Early in 1958 the Secretary General of the OAS invited a group of some 20 distinguished natural scientists from Latin America and the United States to advise on a program of science development which could be executed by the PAU and the OAS. The first meeting of this group which was named the OAS Advisory Committee on Science Development was held in the Academy under the joint auspices of the OAS and the Academy in June 1958 (*see* NEWS REPORT, Vol. VIII, No. 4, pp. 68–69, 1958).

The findings and recommendations of the committee have been published in English and Spanish under the title "The OAS and the Development of Science." One of the

most significant of the recommendations was that the OAS organize a high-level science office within the Pan American Union. This was done and the OAS Office of Science Development was established in September 1958. The Academy continues to work closely with this office. Examples of this collaboration are given below.

The 15th cruise of the oceanographic vessel, *Vema*, of the Lamont Geological Observatory took place October 1957–May 1958 along the coast of South America. Maurice Ewing, Director of the Observatory, received enthusiastically the suggestion that Latin American marine biologists and physical oceanographers be invited to join the staff on board ship, to work with United States scientists, and to benefit by this association and training on the various legs of the voyage of the *Vema* from one port of call to another.

The OAS Office of Science Development and the Academy's Office of International Relations collaborated in facilitating the execution of this plan. Fourteen scientists from Peru, Chile, Argentina, and Puerto Rico took advantage of this opportunity for varying lengths of time. Both the OAS and the Academy provided travel grants for this purpose.

The OAS Science Development Office is responsible for serving as the secretariat for the newly created Inter-American Nuclear Energy Commission (IANEC). This Commission held its first meeting in Washington, October 20–24, 1959, and laid out its program for the future. The OAS invited the Academy to send observers to this meeting. One of the important matters discussed was the need to strengthen scientific training at the formative level and also to strengthen basic research. It was pointed out that the fruitful development of nuclear energy demanded that there be a solid foundation in the basic natural sciences.

The National Scene

As is the case in most international activities, the Academy–Research Council's efforts in Latin America are channelled through Divisions and Offices of the organization. Some Divisions, such as Physical Sciences, have been particularly active. The Executive Committee of the Division has decided to concentrate on Latin America in an effort to assist in building up the physical sciences in the area. Action has already been taken on astronomy, and plans for biophysics in collaboration with the Division of Biology and Agriculture are progressing.

The Division of Chemistry and Chemical Technology has decided to devote particular attention to Latin America and plans to establish a special committee for this purpose. The Division is also investigating the possibilities of arranging symposia on mariculture and medicinal plant resources.

The Academy–Research Council has also collaborated with its sister research councils on Latin American programs operative within the United States, as well as with philanthropic foundations, research institutions, and universities devoting particular attention to Latin America.

The need for better communication between Latin American specialists throughout the hemisphere has been felt for many years, and the United States itself has lacked a focal point for Latin American studies. The American Council of Learned Societies, with foundation support, convoked meetings in 1958 and 1959, with a view to solving these deficiencies, which had been accentuated by the fact that regional councils on Latin American studies had been established in five parts of the country. These considerations led to the Sagamore Conference held at Syracuse University's headquarters in the Adirondacks in August 1959. The American Council of Learned Societies, the Social Science Research Council, and the National Research Council participated, together with the Rockefeller, Ford, and Creole Foundations, the Library of Congress, and the PAU. Twenty-five specialists were invited, principally from universities having Latin American institutes.

The deliberations of the Conference culminated in the creation of the Association for Latin American Studies. A governing council has been selected and several committees have been established and are functioning. The new organization is considered a replacement for the old Joint Committee on Latin American Studies, sponsored by the councils in the early 40's.

The Inter-American Conference on Exchange of Persons was held in San Juan, Puerto Rico, under the auspices of the Institution of International Education (IIE) in October 1958. The Director of the Academy's Office of Scientific Personnel chaired the scientific sessions.

The Stanford Conference on Latin America was organized by the Hispanic American Institute of Stanford and held at Palo Alto, Calif., October 9–11, 1959. Its purpose was to review developments of the last 10 years in Latin America. The author made an address on Inter-American Scientific Relations, stressing the need for considering the impact of science on foreign relations today.

The examples set forth above paint a broad-brush picture of the Academy–Research Council's interest and activities in the development of science and technology in Latin America today. The resulting canvas is faithful in its detail but incomplete as to its coverage.

SCIENCE NEWS

INTER-AMERICAN SCIENTIFIC COOPERATION

Detlev W. Bronk, President of the National Academy of Sciences, has announced the formation of a committee on Inter-American scientific cooperation to be concerned broadly with matters of common interest and concern to the scientists and scientific institutions in the Americas. The structure of the committee will enable it to call upon other experts in all fields of the natural sciences, both basic and applied, as the need arises.

The committee currently is considering the most appropriate ways and means of carrying out its obligations to the International Cooperation Administration concerning the strengthening of science teaching and research capabilities of seven universities in Chile.

The first meeting of the committee on January 5, 1960, was devoted to obtaining each committee member's appraisal of the present situation in Latin America based upon his personal experience and observations. Areas and fields to which the committee should direct its attention were recorded, and representatives of the Divisions of the Academy–Research Council outlined their divisional interests in Latin America. The committee members felt that one of their primary concerns should be the encouragement of scientists and scientific institutions in Latin America in their efforts to improve science teaching in their respective countries.

The committee at its second meeting on January 27 explored more thoroughly the actual methods by which they will be able to operate most effectively. At this meeting the committee was privileged to hear two Brazilians discuss the needs of science and technology in their country: Carlos Chagas, Director, Instituto Biofísico, Universidade do Rio de Janeiro; and Ernesto Luiz de Oliveira, Jr., Chairman, Comissão Supervisora do Plano dos Institutos (COSUPI).

The membership of the committee is as follows:

J. George Harrar, Vice President, The Rockefeller Foundation, *Chairman*
Farrington Daniels, Vice President, National Academy of Sciences, and professor emeritus of chemistry, University of Wisconsin
Watson Davis, Director, Science Service
William D. Johnston, Jr., Chief, Branch of Foreign Geology, U. S. Geological Survey
Clarence F. Jones, Department of Geography, Northwestern University
Ralph A. Krause, Associate Director, Stanford Research Institute
Robert F. Loeb, Columbia University College of Physicians and Surgeons
Paul Mangelsdorf, Director, Botanical Museum, Harvard University
Merle A. Tuve, Director, Department of Terrestrial Magnetism, Carnegie Institution of Washington
Charles Wagley, Chairman, Department of Anthropology, Columbia University
H. P. Robertson, Foreign Secretary, National Academy of Sciences, *ex officio*

FOOD AND NUTRITION BOARD

The 56th meeting of the Food and Nutrition Board was held at the Academy–Research Council Building on October 30, 1959, with Grace A. Goldsmith, Chairman of the Board, presiding.

David B. Hand, Vice Chairman of the Food Protection Committee, presented two reports of that committee to be approved for publication by the Board. The first on "Problems in the Evaluation of Carcinogenic Hazard from the Use of Food Additives" attempts to establish a sound approach to these problems. The second was a revision of "Principles and Procedures for Evaluating the Safety of Food Additives," which has been widely cited as a guide to establishing additives as safe for use.

H. E. O. Heineman, Chairman of the Committee on Milk, introduced two subjects—one dealing with the problem of radionuclides in the food supply, particularly with regard to Strontium-90 in milk, and the other dealing with enterotoxin contamination from nonfat dried milks used in recombined milk preparations. In regard to radionuclides, John Spikes, U. S. Atomic Energy Commission, and Edward Laug, U. S. Food and Drug Administration, made helpful comments.

J. B. Allison, Chairman of the Committee on Amino Acids, announced the publication of the committee's report on the "Evaluation of Protein Nutrition" (NAS–NRC Publication 711). Reports were also presented by C. N. Frey of the Committee on Cereals, by R. E. Shank of the Committee on Dietary Allowances, and by W. H. Sebrell, Jr., Chairman of the Committee on Protein Malnutrition.

Among the new activities proposed for the Board's consideration was the furtherance of proper attention to the nutritional implication in multiple governmental international aid programs. L. A. Maynard, Chairman of the Committee on International Nutrition Programs, outlined the results of a joint meeting held with representatives of the International Cooperation Administration; the U. S. Departments of Agriculture, State, and Defense; and the National Institutes of Health.

E. Neige Todhunter, University of Alabama, deplored the futility of current means of getting the public to understand sound nutrition as opposed to faddish notions and requested that a study of new methods of nutrition education be undertaken. Marjorie Whiting, National Institutes of Health, asked the Board to help foster improvement of dietary evaluation procedures for basic application in nutritional epidemiological research as well as in nutrition education programs.

At the dinner meeting of the Board, Robert R. Williams, Chairman of the Committee on Cereals, who had announced his retirement from the Board, was commended for his services to that body and to the nation generally for furthering the cause of better nutrition.

COMMITTEE ON SCIENCE IN UNESCO

The 17th session of the Committee on Science in Unesco was held at the Academy–Research Council on December 10, 1959, for the purpose of commenting upon the proposed Natural Sciences Program and Budget of Unesco for the biennium, 1961–62. The following members were in attendance:

RALPH E. CLELAND, Indiana University, *Chairman*
WALLACE W. ATWOOD, JR., International Advisory Committee on Research in the Natural Sciences Program of Unesco
T. C. BYERLY, U. S. National Commission for Unesco
F. R. FOSBERG, International Advisory Committee for Humid Tropics Research
RALPH GOETZENBERGER, Engineers Joint Council
DALE JENKINS, International Committee on Laboratory Animals
ROBERT H. HAMLIN, U. S. National Commission for Unesco
ELMER HUTCHISSON, U. S. National Commission for Unesco
LUNA LEOPOLD, International Advisory Committee on Arid Zones
JOHN S. NICHOLAS, Yale University
CARLTON S. PROCTOR, U. S. National Commission for Unesco
MAURICE B. VISSCHER, University of Minnesota

The Committee reiterated its previous recommendation that Unesco increase its support to the total Natural Sciences Program and particularly its subvention to the International Council of Scientific Unions (ICSU). This recommendation was echoed and approved by the Program Committee of the U. S. National Commission for Unesco

a month later with the further stipulation that the Unesco support of ICSU itself be increased from $175,000 to $250,000 annually.

Other significant recommendations made by the Committee on Science in Unesco were that:

1) The activities initiated through the Major Project on Arid Lands Research be continued through other existing mechanisms after the termination of major support from Unesco in 1962; and in this connection, that the U. S. Department of State and the International Cooperation Administration be asked to lend support to the water programs of arid lands institutes located in the Mediterranean area;
2) Unesco provide additional funds for its marine sciences program in the forthcoming biennium in order to establish a firm basis for a major project to begin in 1963, after the termination of the Major Project on Arid Lands Research; and
3) The Humid Tropics Research Program receive additional funds in order to carry out the program recommended by its International Advisory Committee.

SCIENTIFIC ATTACHES VISIT THE ACADEMY–RESEARCH COUNCIL

On December 11, 1959, the Great Hall of the Academy was the scene of the second annual luncheon in honor of the scientific officers attached to the various embassies in Washington. Among the guests were science representatives of 20 countries.

Under the auspices of the Office of International Relations, the luncheon provided an opportunity for the foreign scientific officers to become better acquainted with the Academy staff and professional colleagues from the U. S. Department of State, the National Science Foundation, and the President's Science Advisory Committee.

Howard P. Robertson, Foreign Secretary of the National Academy of Sciences, welcomed the guests; S. D. Cornell, Executive Officer of the Academy, briefly described the history, organization, and functions of the Academy–Research Council; and Wallace W. Atwood, Jr., Director of the Office of International Relations, served as toastmaster and presented a brief account of the activities of his Office.

R. G. Shuttleworth, Scientific Attaché from the Union of South Africa, acting as spokesman for the diplomatic group, expressed appreciation for the Academy's efforts on their behalf. Dr. Shuttleworth, recognized as dean of the science attachés in Washington, took this opportunity to say farewell to his colleagues. He announced that after 7 years of service with the U. K. Scientific Mission in Washington, he was being reassigned to a new post at home in South Africa.

The following countries were represented at the luncheon:

Australia	Italy
Austria	Japan
Belgium	The Netherlands
Canada	Norway
Czechoslovakia	Pakistan
Denmark	Rumania
Germany	Sweden
Great Britain	Switzerland
India	Union of South Africa
Israel	Union of Soviet Socialist Republics

FIFTH INTERNATIONAL CONGRESS ON NUTRITION

The Fifth International Congress on Nutrition will be held in Washington, D. C., September 1–7, 1960, under the auspices of the International Union of Nutritional Sciences, the American Institute of Nutrition, and the U. S. National Committee for the International Union of Nutritional Sciences. Government agencies and foundations here and abroad, and a large segment of the American food industry are providing financial support for the Congress, which will implement the most important exchange of knowledge in recent years on current nutrition research. The scientific sessions will be supplemented by industrial and institutional exhibits and visits to laboratories and other places of interest in the Washington area.

The main feature of the scientific program will be an all-day symposium on "World Food Needs and Food Resources," on Tuesday, September 6, 1960. The symposium will cover the following topics: 1) The world's increasing population, 2) food problems resulting from increasing population, 3) soil resources of the world, 4) water resources of the world, 5) increasing world production and distribution of food, 6) major nutrition problems today, 7) socio-economic factors that limit needed

production and consumption, 8) the prospect of meeting protein needs, and 9) food and protection of public health.

The remainder of the program will consist of seven half-day panel discussions by invited participants, and special sessions of 10-minute papers reporting unpublished original research. The panels and their moderators will be as follows:

1—Evaluation of Nutritional Status in Man, with E. W. McHenry, Toronto, Canada, as moderator

2—Effects of Processing and Additives on the Nutritive Values of Foods, with W. J. Darby, Nashville, Tenn., as moderator

3—Lipids in Health and Disease, with K. Lang, Mainz, Germany, as moderator

4—Animal Nutrition and Food Production, with D. P. Cuthbertson, Aberdeen, Scotland, as moderator

5—Nutrition in Maternal and Infant Feeding, with F. W. Clements, Sydney, Australia, as moderator

6—Proteins and Amino Acids in Nutrition, with J. F. Brock, Cape Town, South Africa, as moderator

7—Three Hours Around the World: New Possibilities in Nutritional Research, with V. Ramalingaswami, New Delhi, India, as moderator.

It is anticipated that some 2,500 nutritionists representing almost every country in the world will participate in the Congress. Simultaneous translation into English, Spanish, French and German will be provided at the scientific sessions, and bilingual hosts and hostesses will be assigned to non-English-speaking registrants for many of the social events. Additional information regarding the scientific program of the Congress and rules for the submission of papers may be obtained from Milton O. Lee, General Secretary, 9650 Wisconsin Avenue, Washington 14, D. C.

PROJECT WALRUS

Technological advice expected to be helpful to the Maritime Administration in overcoming many maritime problems is featured in the Academy–Research Council report "The Role of the U. S. Merchant Marine in National Security" recently issued (*see* New Publications, p. 16). This report represents the culmination of efforts of a study conference held last summer at Woods Hole, Mass. The report was prepared by the 9-man Advisory Panel on Wartime Use of the U. S. Merchant Marine headed by Adm. Arthur W. Radford, USN (Ret.), former chairman of the Joint Chiefs of Staff. This panel is one of the six panels of the Maritime Research Advisory Committee, operating under a contract between the Maritime Administration and the National Academy of Sciences.

Recommendations of the report stress the importance of research in assisting the U. S. Merchant Marine to regain economic self-sufficiency without subsidy. Such self-sufficiency can best be achieved through the application of automation and mechanization to ship operation, ship construction, and cargo handling. It is recognized that current management-labor difficulties, coupled with the wording of the subsidy law, form serious impediments to the adoption of the recommended technological developments. The report, therefore, delves into these problems and advises the Maritime Administration to take the lead in recommending new legislation and labor-management practices.

Many other specific recommendations are contained in the report. These include several technological developments such as higher ship speeds, lighter and more economical hulls, improved machinery, and systems analysis. Of particular interest is the recommendation that the Maritime Administration consider the establishment of a new comprehensive maritime research center to further both technical and operational research.

The members of the panel, who were aided in their study by representatives of Government agencies, the military services, universities, and industrial organizations are:

ADM. ARTHUR W. RADFORD, USN (Ret.), *Chairman*
PAUL W. CHERINGTON, Graduate School of Business Administration, Harvard University
JOHN COMSTOCK, Newport News Shipbuilding and Dry Dock Company
SAMUEL E. EASTMAN, Washington Research Office Technical Operations, Inc.
EDWARD L. KATZENBACH, JR., Brandeis University
FINN J. LARSEN, Minneapolis-Honeywell Regulator Company
DOUGLAS C. MACMILLAN, George G. Sharp, Inc.
HARTLEY ROWE, Consultant, Jackson and Moreland
RAYMOND S. STEVENS, Arthur D. Little, Inc.

BUILDING RESEARCH INSTITUTE SPRING CONFERENCES

Committees are currently working on the program to be presented at the Spring Conferences of the Building Research Institute to be held, April 5–7, at the Statler-Hilton Hotel, New York City. To date the Program Committee has approved eight working sections. The titles of the sections and the names of the chairmen are as follows:

1) Surface Preparation and Field Application of Paints and Coatings—Harry Ross Young, E. I. duPont de Nemours & Co., Inc.
2) Use of Adhesives for Bonding Wallboard and Cementitious Material and for Wood Structural Lamination—George Schulte, Minnesota Mining and Manufacturing Co.
3) Operation and Maintenance Costs on Four Types of Buildings—Howard E. Phillips, American Telephone and Telegraph Co.
4) Reports on College and University Building Research Projects—Harold D. Hauf, Rensselaer Polytechnic Institute
5) Proposals for New Building Research—James E. Lendrum, University of Florida
6) Insulated Masonry Cavity Walls—Chairman to be announced
7) Plastics Information Workshop—William F. Reardon, General Electric Company
8) Air Cleaning and Purification in Buildings—John E. Haines, Minneapolis-Honeywell Regulator Company

Further information regarding the Spring Conferences may be obtained from Milton C. Coon, Jr., Executive Director, Building Research Institute, Academy–Research Council.

STUDY OF VETERANS ADMINISTRATION MEDICAL RESEARCH PROGRAM

The Division of Medical Sciences is conducting a study of the medical research program of the Veterans Administration. The purpose of the study, as stated by the Veterans Administration, is "to evaluate what has been accomplished in the past, to determine the direction in which the program is now going, and to project the needs and requirements for the future." There is considerable enthusiasm in the Division about the study because the results will be of interest not only to the Veterans Administration but to the medical sciences in general.

The study will be guided by a committee headed by Chester S. Keefer, Dean of the Boston University School of Medicine and a member of the Executive Committee of the Division. Other members are:

Dean A. Clark, General Director, Massachusetts General Hospital
Frank Glenn, Professor of Surgery, Cornell University Medical College
W. Stanley Hartroft, Professor of Pathology, Washington University
James T. Howell, Assistant Director, Henry Ford Hospital
James V. Neel, Professor of Human Genetics, University of Michigan Medical School
Dickinson W. Richards, Professor of Medicine, Columbia University College of Physicians and Surgeons
Anthony J. J. Rourke, Hospital Consultant and past President, American Hospital Association
Gordon H. Scott, Dean, Wayne State University College of Medicine
Harry C. Solomon, Emeritus Professor of Psychiatry, Harvard Medical School
Harold G. Wolff, Professor of Neurology, Cornell University Medical College.

Robert I. McClaughry of the Division staff has been assigned to this project.

The committee has constructed the general plan for the study, and collection of data on which the report will be based is under way. Among major concerns will be the question of whether or not the conduct of research by the Veterans Administration is justified and, if so, what organizational structure seems best for carrying it out in this widespread hospital system. An interesting aspect of the general problem which the Committee has been asked to consider is how the best use can be made of the many case records in the Veterans Administration through modern electronic data processing devices.

INTERNATIONAL ATOMIC ENERGY AGENCY FELLOWSHIPS

For the past year the Academy–Research Council has been administering a program of fellowships in cooperation with the International Atomic Energy Agency (IAEA) in Vienna (*see* News Report, Vol. IX, No. 4, p. 60).

This program supported by funds from the International Cooperation Administration, brings to the United States foreign scientists from all parts of the world for study in areas of science related to the peaceful uses of atomic energy. The Academy–Research Council receives nomina-

tions from the IAEA and arranges their placement in appropriate universities and research institutions, including the several laboratories of the U. S. Atomic Energy Commission and its contractors.

Since the program was inaugurated well over one hundred nominations have been received. Sixty of these fellows have taken up residence in the United States since June 1, 1959; 12 additional fellows were in this country before June 1, and 7 of these have already completed their terms and returned home. In addition, 41 fellows have been accepted and will arrive in the ensuing weeks, and 25 additional nominations are now being considered for appropriate placements. In all, a total of 145 applications have been received.

The program promises to be an important factor in the development of the peaceful uses of atomic energy throughout the world. While the United States is host to the largest number in the whole international program, substantial numbers are also being received by other countries which are in the forefront of the development of the nuclear sciences. There is much interest in the program throughout the world, especially in nuclear physics, radiation chemistry, engineering, and in biological and medical applications.

To date applications have been received from 37 countries, including Czechoslovakia, Egypt, Hungary, Japan, Poland, Rumania, and Thailand.

UNESCO AND SCIENCE IN LATIN AMERICA

Steps have already been taken to follow up on the action recommended at the science sessions of the Seventh National Conference of the U. S. National Commission for Unesco with a view toward furthering and improving cooperation among the scientists and engineers of the Americas. The details of the science program of the Conference, which was held in Denver, Colo., September 29–October 2, 1959, were given in a previous issue of NEWS REPORT (*see*, Vol. IX, No. 4, p. 57, 1959).

The Committee on Science in Unesco asked an ad hoc Panel on Science in Latin America to meet at the Academy–Research Council on December 9 to draft a proposal designed to implement the Conference recommendations. This was done and the proposal was unanimously adopted by the Committee at its meeting the next day.

One of the principal recommendations contained in the proposal, initially heard at the Denver Conference, calls for the creation of an inter-American science council. Exploration of ways and means to implement this recommendation is being carried forward with growing impetus. The Panel expressed the belief that, in the long run, economic development in Latin America depends upon the development of science and technology and the development of science and technology, in turn, depends upon the development of the available resources, especially the natural resources, of the country concerned and upon inter-American cooperative effort.

One of the functions of an inter-American scientific body would be to bring about the establishment, development, and support of regional research centers in various fields of both basic and applied science.

Another recommendation of note requests that the U. S. Department of State ask the appropriate Government agencies to seek funds for increased support of education and research in Latin America.

A report covering the science sessions of the Denver Conference is being prepared and will be published by the Unesco Relations Staff of the Department of State.

AMERICAN MISCELLANEOUS SOCIETY MOHO COMMITTEE

A special study group of some 20 engineers was convened by the Moho Committee in Washington, D. C., from November 30 to December 4, to consider how an existing drilling ship could be used to obtain preliminary data about deep sea drilling. These engineers, representing oil, drilling, machinery, and steel companies, managed to formulate a plan which has since become an internal committee report: "Experimental Drilling in Deep Water." The study group determined the drilling methods to be used, the means of holding the ship in position, and the kinds of measurements to be made. It is hoped that sufficient funds will be available before the end of 1960 to carry out the necessary sea trials.

ADVISORY COMMITTEE ON AFRICA SOUTH OF THE SAHARA

The steering committee which conducted a study of technical aid in the region of Africa south of the Sahara completed its responsibilities with the submission to the International Cooperation Administration (ICA) of a report entitled "Recommendations for Strengthening Science and Technology in Selected Areas of Africa South of the Sahara." The steering committee has now been discharged with appreciation for its valued services, and the President of the Academy has appointed a continuing Advisory Committee to counsel ICA on the implementation of the above named report.

The new committee, in addition to its specific responsibilities to ICA, will strive to represent American science generally in furthering the development of science, engineering, agriculture, and medicine in under-developed areas of Africa. The first meeting of the new Advisory Committee will be held in the near future. Membership of this committee is as follows:

W. ALBERT NOYES, Department of Chemistry University of Rochester, *Chairman*
PAUL J. BOHANNAN, Department of Anthropology, Northwestern University
C. W. DE KIEWIET, President, University of Rochester
PHILIP GUILD, U. S. Geological Survey
J. GEORGE HARRAR, Vice President, Rockefeller Foundation
WILLIAM I. MYERS, Dean, College of Agriculture, Cornell University
FREDERICK D. PATTERSON, Director, Phelps-Stokes Foundation
THOMAS H. WELLER, Head, Department of Tropical Public Health, School of Public Health, Harvard University
H. P. ROBERTSON, Foreign Secretary, National Academy of Sciences, *ex-officio*

GEOGRAPHIC FIELD RESEARCH

The Screening Committee for the Foreign Field Research Program of the Division of Earth Sciences met on December 13 and 14 to evaluate the 33 applications for support which had been received under the program sponsored by the Geography Branch of the Office of Naval Research (ONR). Edward B. Espenshade, Jr., Chairman-Designate of the Division, presided and the other members were Edward A. Ackerman, Carnegie Institution of Washington; Lester E. Klimm, University of Pennsylvania; and Shannon McCune, University of Massachusetts.

Of the 33 applications submitted, 8 were recommended for support of proposed geographic field research in foreign areas. This makes a total of 45 young scientists who are receiving or have received assistance under the ONR program which affords young geographers an opportunity to do research on topics and in areas of their own choosing. Most of the investigators' reports will become their doctoral dissertations. So far six reports have been printed; two more are in process of publication and a third has been submitted for publication.

CONFERENCE ON STABILITY OF PLASTICS

The Prevention of Deterioration Center and the Baltimore-Washington Section of the Society of Plastics Engineers co-sponsored a Regional Technical Conference on Stability of Plastics at the Academy–Research Council building on December 1, 1959. Approximately 425 persons were in attendance. Myron G. DeFries of the Atlantic Research Corporation served as general chairman of the Conference; and Herman Mark, Director of the Polymer Institute, Brooklyn Polytechnic Institute, and Gordon Kline, Chief of the Division of Organic and Fibrous Materials, National Bureau of Standards, were moderators of the morning and afternoon sessions respectively.

Although such terms as "degradation", "decomposition", and "depolymerization" must be used often in discussing the reactions of plastics to deteriorative factors of the environment, the theme of the conference was the positive approach connoted by the term "stability."

The nine papers comprising the program reported surveys of current theories of the mechanism of polymer degradation as well as results of original investigations. The subjects discussed included mechanisms of and stabilization against thermal, oxidative, ultraviolet, enzymatic, and mechanical degradation. Polyethylene, polyvinyl chloride, polyurethanes, cellulosics, polyethers, and fluorinated polymers were also discussed.

One-thousand-word abstracts of the papers presented are available in sets from the Society of Plastics Engineers, Stamford, Conn.

ACADEMY MEMBERS TO VISIT ASIA

Two members of the National Academy of Sciences will visit 11 Asian countries during the next four months to discuss with Asian scientific leaders matters of common interest and concern in the futherance of research and education in science, engineering, and related fields. Under arrangements made with the Asia Foundation, Farrington Daniels, Vice President of the Academy and professor emeritus of chemistry, University of Wisconsin; and Ralph E. Cleland, Chairman of the Committee on Science in Unesco and professor of botany, Indiana University, will visit Pakistan, India, Burma, Thailand, Malaya, Indonesia, the Philippines, Viet Nam, Republic of China (Taiwan), Republic of Korea, and Japan, as well as Singapore and Hong Kong. Mrs. Daniels will accompany her husband throughout the trip.

Conversations will be held not only with the heads of leading scientific organizations in each country, but also with government officials in science and education, members of science and engineering faculties, and researchers in basic and applied sciences. Harold J. Coolidge, Executive Director of the Pacific Science Board, will accompany Drs. Daniels and Cleland on part of the trip.

In addition to personal conversations, the Academy members will lecture before scientific societies and participate in symposia and seminars that concern their various scientific specialties. A three-year program set up with the Asia Foundation will enable them to invite distinguished scientists from Southeast Asia to spend several months in the United States as guests of the National Academy of Sciences so that they may learn firsthand the structure of science organization in this country.

MATHEMATICS OF COMPUTATION

Beginning with the January 1960 issue, the title of *Mathematical Tables and Other Aids to Computation* has been changed to *Mathematics of Computation.* The new name reflects the broadened scope of the journal, which has expanded to meet the need in this country for a publication devoted to numerical analysis and computation. The new title in no way represents a diminished interest in mathematical tables, which will continue to be a subject of major emphasis, as in the past. It recognizes, however, an increased interest in other areas in the field of *Mathematics of Computation,* which have grown in importance and in which rapid advances are now being made.

Subscribers will find future issues of the journal to be a continuation of the former journal so far as style, format, and character of contents are concerned; but there will be increased coverage of modern advances in the theory and application of computational methods. The journal will continue to be published quarterly.

BUILDING RESEARCH INSTITUTE EDUCATION LIAISON COMMITTEE

To stimulate interest in building research among college and university faculties and students, the Education Liaison Committee of the Building Research Institute (BRI) under the chairmanship of Harold D. Hauf, Rensselaer Polytechnic Institute, has embarked on an active program.

The first step was to offer grants of $100 to several schools so that a representative could attend the BRI 1959 Fall Conferences in Washington and report on the proceedings on his own campus. As a result the Departments of Architecture of Ohio State University, Virginia Polytechnic Institute, and the University of Pennsylvania, and the Department of Mechanical Engineering of Manhattan College were represented. The Committee also extended invitations to schools in the Washington area to register faculty members or students without charge, and 20 persons attended.

Another activity of the Committee has been the complimentary distribution of four BRI books to the heads of 77 departments of architecture and 139 departments of civil engineering in schools throughout United States and Canada. The books were taken from the BRI inventory of "Windows and Glass," "Modern Masonry," "Plastics in Building," and "Floor-Ceilings and Service Systems in Multistory Buildings."

As a result of the interest aroused by this program, the BRI Board of Governors has allocated $2,000 to further the work of the Committee during the coming year.

STAFF APPOINTMENTS

The Division of Earth Sciences has announced the appointment of **Francois Lampietti** and **Edward E. Horton** as staff engineers for the Moho Committee of the American Miscellaneous Society. Mr. Lampietti received his M. S. degree in mining engineering from the University of California at Berkeley in 1956 and served two years in the U. S. Army Corps of Engineers before joining the Academy–Research Council staff. Mr. Horton received his M.S. degree in petroleum engineering from the University of Southern California in 1957 and was formerly employed by the Standard Oil Company of California. **Robert Taggart,** who graduated from Webb Institute of Naval Architecture in 1942, is also working for the Committee part-time as a naval architect in connection with the design of the drilling ship to be used.

The Office of Scientific Personnel has announced the appointment of **Stanley B. Fracker** as Assistant to the Director of that Office. During the next 6 months, Dr. Fracker will visit the foreign scientists currently in the United States under the Visiting Research Scientists Program supported by the International Cooperation Administration and administered by the Academy. The purpose of the visits will be to discuss the functioning of the program with the visiting scientists and with the heads of the University departments with whom they are working.

Dr. Fracker retired from the U. S. Department of Agriculture in 1958, where he was Assistant to the Administrator of the Agricultural Research Service for interdepartmental and international relations.

RECORD OF MEETINGS

November	
1	Committee on Shock
2–3	Symposium on Central Nervous System Control of Circulation
3	Panel on Aircraft and Astronautics Applications, Sub-panel on Structures and Airframes, *Pittsburgh*
4	Committee on Anesthesia
	Subcommittee on Atmospheric and Industrial Hygiene
4–5	Agricultural Pest Conference
	Panel on Aircraft and Astronautics Applications
5	Advisory Panel to Building Technology Panel, Sub-panel on Structural Engineering and Concreting Materials
	Committee on International Exchange of Persons
	Highway Research Board, Ad hoc Committee on Skid Resistance
	Subcommittee on Nuclear Reactors
6	Panel on Aircraft and Astronautics Applications, Sub-panel on Pneumatics, Hydraulics, and Launch Complex
	Federal Construction Council, Task Group on High Temperature Hot Water Systems
	Nuclear Science Committee
6	Federal Construction Council, Task Group on Test Procedures for Underground Heat Distribution Systems
7–8	Armed Forces—National Research Council Committee on Bio-Astronautics, *Pensacola*
	National Science Foundation Senior Postdoctoral Fellowship Evaluation Committees
9	Subcommittee on Personnel and Training
	Building Research Advisory Board and Building Research Institute, Joint Policy Committee, *New York City*
10	Maritime Cargo Transportation Conference
	Port Study Committee
	Federal Construction Council, Operating Committee
12	Advisory Screening Committee for Fulbright Fellowships in Chemistry and Chemical Technology
	Committee on Cartography Advisory to the Department of State
	Advisory Board on Quartermaster Research and Development, *Natick, Mass.*

November	
13	Committee on Radiation Preservation of Food, *Natick, Mass.*
	Advisory Screening Committee for Fulbright Fellowships in Medical Sciences
	Subcommittee on Oncology
	Federal Construction Council, Task Group on High Temperature Hot Water Systems
14	Committee on Mathematics Advisory to the Committee on International Exchange of Persons
16	Department of Defense, Materials Review Committee No. 4
	Building Research Institute, Board of Governors
	Titanium Sheet Rolling Panel, Working Group
	Committee on Astronomy Advisory to Office of Naval Research
16–17	Committee on Climatology Advisory to the U. S. Weather Bureau, *Asheville, N. C.*
16–18	National Academy of Sciences, Autumn Meeting, *Bloomington, Ill.*
17	Panel on Electronics and Wide Band Optics, *Dayton*
	Panel on Chemistry of Plasma Flames
18	Building Research Institute, Building Operation and Maintenance Study Group
	Building Research Institute, Publications and Publicity Committee
	Committee on the Survey of Medical Research in the Veterans Administration
	Subcommittee on Toxicology
	Advisory Screening Committee for Fulbright Fellowships in Psychology
19	Building Research Institute, Research Committee
	Federal Construction Council, Task Group on Cold Storage Refrigeration
20	Building Research Institute, Adhesives and Sealants Planning Committee
	Building Research Advisory Board
	Advisory Screening Committee for Fulbright Fellowships in Engineering and Industrial Research
21	Pacific Science Board, Annual Meeting, *Berkeley, Calif.*
22	Committee on Blood and Related Problems, *St. Louis*

November	
22	Subcommittee on Transfusion Problems, *St. Louis*
24	Panel on Machining, *Dayton*
	Advisory Screening Committee for Fulbright Awards in Physics and Astronomy
	Committee on Subsistence Packaging, *Chicago*
27	Committee on Trauma
	Subcommittee on Dog Nutrition, *Chicago*
28	Subcommittee on Fluorosis Problems in Livestock Production, *Chicago*
	American Miscellaneous Society, Moho Committee
29	Committee on Animal Health, *Chicago*
30	Subcommittee on Water Supply
	Committee for Conference on Beef, *Chicago*
	Ad hoc Advisory Committee on Marine Biology

December	
1	Committee on Sanitary Engineering and Environment
	Agricultural Research Institute, Conference Committee
	Regional Technical Conference on Stability of Plastics
1–2	Refractory Metal Sheet Rolling Committee
2	Department of Defense, Materials Review Committee No. 1
	Port Study Committee
2–4	Armed Forces—National Research Council Committee on Bio-Astronautics, Panel on Psychology
	Conference on Molecular Radiobiology, *Ardsley-on-Hudson*
3	Department of Defense, General Materials Review Committee
	Committee on Container Development, *Chicago*
3–5	Committee on Prosthetics Research and Development, *Chicago*
4	Conference on Nutrition and Response of Whole Body Ionizing Radiation, *Chicago*
5	Advisory Panel to National Bureau of Standards Mechanics Division
7	Panel on Aircraft and Astronautics, Sub-panel Chairmen, *San Diego, Calif.*
	Institute of Laboratory Animal Resources, Governing Board
8	Agricultural Research Institute, Conference Committee

December	
8	Federal Construction Council, Task Group on Refrigerated Storage Installations
8–9	Materials Advisory Board, Panel on Rolling, Cold Forming, and Cold Extrusions, *Los Angeles*
9	Panel on Aircraft and Astronautics Applications, Sub-panel on Pneumatics, Hydraulics, and Launch Complex, *Los Angeles*
	Ad hoc Committee on the Follow-up Study of Radiologists
	Committee on Science in Unesco, Panel on Science in Latin America
9–10	Food Protection Committee, Industrial Liaison Panel
10	Committee on Science in Unesco
	Committee on a National Atlas of the United States
10–11	Armed Forces—National Research Council Committee on Vision, Executive Council
	Building Research Advisory Board, Technical Studies Advisory Committee
11	U. S. National Committee, International Union of Physiological Sciences
11–12	Committee on Geography Advisory to the Office of Naval Research

December	
12	Division of Earth Sciences, Executive Committee
	Ocean Survey Panel
	Advisory Panel to National Bureau of Standards Mineral Products Division
	Division of Mathematics, Nominating Committee, *New York City*
13	National Academy of Sciences—National Research Council, Governing Board
13–14	Screening Committee for the Foreign Field Research Program
14	Committee on Biological Chemistry
	Division of Engineering and Industrial Research, Executive Committee
	Ship Structure Subcommittee, Ultrasonics Subcommittee
15–16	Refractory Metal Sheet Rolling Committee, *Bridgeville, Pa.*
17	Arid Zones Advisory Committee
21	Federal Construction Council, Operating Committee
	Building Research Advisory Board, Subcommittee on Plastic Materials
29	Building Research Institute, Education Liaison Committee, *New York City*
	Committee on International Anthropology, *Mexico City, D. F.*

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Cahill, Laurence J., Jr. *Magnetic Exploration of the Upper Atmosphere.* Washington, NAS–NRC, 1959. (National Academy of Sciences, IGY World Data Center A, Rockets and Satellites. IGY Rocket Report Series No. 4.) 88 p., illus. $1.00.

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National Research Council. Highway Research Board. *Flexible Pavement Design Research 1959.* Washington, 1959. (NAS–NRC Publication 695. Highway Research Board Bulletin 233.) 56 p., illus. $1.00.

National Research Council. Highway Research Board. *A Framework for Urban Studies: An Analysis of Urban-Metropolitan Development and Research Needs.* Washington, 1959. (NAS–NRC Publication 722. Highway Research Board Special Report 52.) 29 p. $1.20.

National Research Council. Highway Research Board. *Land Acquisition—1959.* Washington, 1959. (NAS–NRC Publication 694. Highway Research Board Bulletin 232). 123 p. $2.40.

National Research Council. Highway Research Board. *Lime and Lime-Flyash as Soil Stabilizers.* Washington, 1959. (NAS–NRC Publication 693. Highway Research Board Bulletin 231.) 91 p., illus. $0.50.

National Research Council. Highway Research Board. *Performance and Tests of Asphaltic Concrete.* Washington, 1959. (NAS–NRC Publication 696. Highway Research Board Bulletin 234.) 22 p., illus. $0.50.

National Research Council. Highway Research Board. *State Constitutional Provisions Concerning Highways, A Legal Analysis.* Washington, 1959. (NAS–NRC Publication 692. Highway Research Board Special Report 50.) 84 p., illus. $2.40.

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Notice of Academy Meetings

NATIONAL ACADEMY OF SCIENCES

Annual Meeting, Washington, D. C., April 25–27, 1960

NATIONAL RESEARCH COUNCIL

Annual Meeting, Washington, D. C., March 24–26, 1960

NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL

Governing Board, Washington, D. C., April 24, 1960
Governing Board, Washington, D. C., June 12, 1960

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The search for Truth is in one way hard and in another easy. For it is evident that no one can master it fully nor miss it wholly. But each adds a little to our knowledge of Nature, and from all the facts assembled there arises a certain grandeur.

—ARISTOTLE

V